

1-22-13

PROPORTIONS

- Equivalent ratios (relationship between the #s in each ratio is the same)

Ex:

$$\frac{3}{4} = \frac{6}{8}$$

24 = 24

Yes, a proportion

Ex:

$$\frac{5}{6} = \frac{7}{8}$$

40 < 42

No, not a proportion

** To find missing values (variables),
cross-multiply (heart method) to set
up an algebraic equation. Then, divide
to solve.

Ex:

$$\frac{x}{3} = \frac{18}{9}$$

$$\frac{9x}{9} = \frac{54}{9}$$

$$x = 6$$

Ex:

$$\frac{5}{6} = \frac{20}{y}$$

$$\frac{5y}{5} = \frac{120}{5}$$

$$y = 24$$

EX:

$$\frac{6}{2} = \frac{21}{x}$$

$$\frac{\cancel{6}x}{\cancel{2}} = \frac{42}{6}$$

$$x = 7$$